XX. *Extract of a Regiſter of the Barometer, Thermometer, and Rain, at* Lyndon, *in* Rutland, 1775. *By* Thomas Barker, *Eſquire. Communicated by Sir* John Pringle, *Bart. P. R. S.*

R. June 27, 1776.

		Barometer.			Thermometer.						Rain.
					In the Houſe.			Abroad.			
		Higheſt	Loweſt.	Mean.	High.	Low.	Mean	High.	Low.	Mean	
Jan.	Morn.	29,91	28,72	29,33	47	30	40½	50	20	36½	1,973
	Aftern.				48	31	41½	52½	26	41	
Feb.	Morn.	29,91	28,35	29,24	48	39½	44	49	31½	39	2,522
	Aftern.				49	41	45	51½	36	46	
Mar.	Morn.	30,09	28,61	29,32	48	38	44	46½	28	36½	1,728
	Aftern.				49½	39½	45	54	34	46½	
Apr.	Morn.	29,97	29,05	29,60	64½	40½	49	55	36	44	1,035
	Aftern.				67	42½	51	80	47	55½	
May	Morn.	29,94	29,31	29,67	62	49½	55½	58½	36	49	0,900
	Aftern.				64	50½	57	73	53	61	
June	Morn.	29,87	29,17	29,49	66½	58	62	62	50	56	0,887
	Aftern.				68	59	64	78	59	69½	
July	Morn.	29,71	29,16	29,41	66½	58½	63	63	52	58	4,078
	Aftern.				68	60	64½	78	58½	70	
Aug	Morn.	29,60	28,98	29,37	65	58½	62	61	48½	54½	4,760
	Aftern.				66	60	63	72	53	65	
Sept.	Morn.	29,67	29,02	29,31	64½	55½	60	60	45½	52½	5,670
	Aftern.				65½	56½	61	71	53	63	
Oct.	Morn.	29,80	28,50	29,38	59½	43½	51½	57½	30	43	3,480
	Aftern.				59½	45	52½	65	39	52	
Nov.	Morn.	29,96	28,50	29,34	48	39	42½	52	26½	36	3,570
	Aftern.				50	39	43	56	34	41½	
Dec.	Morn.	30,06	28,15	29,54	51	35½	42	52	24½	35	1,096
	Aftern.				51½	35½	42	55½	32	40	
											31,699

In four years, 1740, 41, 42, and 43, there came but in. 66,361 of rain. In the laſt four years 1772, 73, 74, and 75, there was in. 124,957, which is nearly twice as much.

The proportion that the mean months bear to the whole years at ſeveral periods.

	1736-40	41-50	51-60	61-70	71-75	36-75
January	.054	.076	.078	.069	.070	.073
February	.051	.046	.052	.074	.073	.061
March	.047	.074	.066	.049	.058	.061
April	.057	.075	.086	.056	.035	.065
May	.075	.064	.073	.071	.094	.074
June	.075	.123	.097	.112	.079	.101
July	.139	.111	.134	.107	.072	.111
Auguſt	.163	.059	.122	.099	.111	.105
September	.113	.095	.062	.074	.156	.092
October	.081	.094	.071	.115	.102	.093
November	.052	.105	.073	.100	.084	.086
December	.093	.078	.086	.074	.066	.078
	1.000	1.000	1.000	1.000	1.000	1.000

The year began favourable, the winter was mild and not in general wet; there was indeed a pretty deal of rain the firſt half of February, but the latter part of that month was warm and forwarding, and the ſpring continued to advance from that time with much fewer froſty mornings and N.E. winds than there frequently

are at that ſeaſon, the many ſtrong Weſterly winds keeping them back. The ſeed-time was fine, and the ſeaſon good for corn. There were Northerly winds the former part of April, but they were not ſharp ones; and the latter part of the month was hot, ſome days more ſo than in the height of ſummer.

The former part of the ſummer was fine, hot, and dry; ſome ſtony pariſhes burnt a good deal, eſpecially where the grounds were hard-ſtocked, and the crop of hay was but was ſmall; yet in general the graſs had got ſo forward in ſpring that it held out pretty well. There was a great deal of fine weather this year; and though there was a great deal of rain in the latter part of the ſummer, ſo much fine weather was intermixed with it that moſt of the hay and harveſt were got in well. Theſe rains began the beginning of July, were conſiderable but not frequent at firſt, came oftener toward the end of it and in Auguſt, and were almoſt continual the firſt three weeks of September, with ſeveral thunder-ſtorms. What harveſt was ſtill out, which in this country was chiefly peaſe and beans, was much ſpoiled; but in the fens and ſeveral other countries a good of barley was not finiſhed. The latter end of September and beginning of October were fine, and finiſhed the harveſt; but the rains returned again, and continued to the end of November, yet in leſs quantities than before, and the wheat ſeed-time was pretty good. The end of the year was fine and in general dry; at firſt warm, and afterward frequent froſty mornings, but no ſettled froſt. The dry weather

before Midſummer ſuited the wheat and barley, which were this year a good crop, and the grain large and fine, and cheaper than they have been for ſeveral years paſt.

The weather was leſs favourable in the South of England; the dry ſpring was drier and more burning; the barley of two growths, and ſome did not come up till Midſummer. The wet afterward was alſo greater, eſpecially in Hampſhire, ſo that their hay and harveſt ſuffered more than ours, and their barley, in particular, coming up late, was late ripe, and was half, or in ſome places moſt of it, damaged by the wet. The barley failed alſo in Norfolk, it not earing well on account of the dry ſeaſon.

For a good many years paſt, ſince the ſeaſons have been in general wet, the nature of Eaſt winds has been very different from what it was before. Several years after the great froſt in 1740 there were a great many N.E. winds in ſpring, but they were in general cold and dry, ſtopping vegetation; but for the laſt ten years, the Eaſt winds have been often very wet; many of the greateſt ſummer floods were by rain out of that quarter, and many times there came rain almoſt as certainly as the wind turned Eaſt.

An experiment of parting freſh-water from ſalt by freezing.

IN the ſevere froſt laſt January, ſome ſalt-water, being ſet abroad, froze into an ice which was not ſolid but porous, the hollows being filled with the ſalteſt part of the water, for the ice, when drained, was quite freſh.

The ſalt-water, being again ſet abroad, froze as before; what remained ſtill unfrozen was now become exceeding ſalt, but the ice, drained and diſſolved, was little if at all brackiſh. This agrees with what Captain COOK mentions in his late voyage, that in 61° 35′ South latitude they filled their water caſks with freſh-water, melted out of ice found floating in the ſea. By this experiment, if another time more fully repeated, it may be found to what degree the ſaltneſs of water may be increaſed, by continuing to freeze away the freſh-water.

May not the knowledge of this be of uſe to the ſalt-makers, eſpecially in cold countries? The Sun is ſtrong enough of itſelf between the Tropics to dry away the ſea-water into ſalt; and, I think, at the ſalt-works near Lymington, they increaſe the ſaltneſs of the ſea-water by drying it away in the Sun before they boil it into ſalt. And this ſeems to be another means of parting freſh-water from the ſalt, which would ſave expence in boiling it away, and may be of uſe in the cold countries, and in winter.